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Region's History With 1-Hour Ozone Standard

- 1977 - Area originally designated as an interstate nonattainment area.
 - Nonattainment area includes Jefferson County, KY, portions of Bullit and Oldham Counties, KY, and Clark and Floyd Counties in Indiana.
- 1990 - Area classified as a “moderate” nonattainment area pursuant to CAA amendments.
- 1995 - 15% Rate of Progress Plan Submitted

Control Measures Implemented (examples)

- Upgraded Vehicle Inspection and Maintenance
 - Low RVP gasoline
 - Stage II vapor recovery
 - Automobile refinishing
 - NO_x RACT
 - VOC RACT controls (e.g., shipbuilding, furniture coating)
 - Tier I engine standards
- 2001 - Redesignated to attainment (classified as a maintenance area)
- Future Controls** - Regional NO_x Rules, Tier II engine/fuel standards, cold cleaning degreasing.

Overview of the Eight-Hour Ozone Standard

- July 17, 1997 - U.S. EPA announced new stricter national ambient air quality standards (NAAQS) for ground-level ozone.
- May 1999 new standards challenged in court.
- Spring 2000 - U.S. EPA released guidance concerning the designation process. States were encouraged to provide recommendations to U.S. EPA by June 30, 2000.
- June 30, 2000 - Indiana's original 8-hour nonattainment assessment was submitted to U.S. EPA.
- February 27, 2001 – U.S. Supreme Court upholds 8-hour ozone standard after designations delayed due to legal challenges.
- November 14, 2002 - U.S. EPA issues memorandum stating that designations will be final by April 2004. States are asked to submit recommendations by April 15, 2003.
- February 27, 2003 - U.S. EPA issues memorandum granting states until July 15, 2003 to submit recommendations.



Overview of the Eight-Hour Ozone Standard

Layout of U.S. EPA's Proposed Process for Designations

November 14, 2002 U.S. EPA memorandum outlines the schedule for designating areas under the 8-hour ozone (O₃) standard.

- Consistent with Section 107 of the Clean Air Act, U.S. EPA is requesting States to provide designation recommendations to the Regional Administrator by July 15, 2003.
- 2000-2002 monitoring data should be used for devising recommendations. However, U.S. EPA will use the 2001-2003 data for promulgating final designations if the data are available and quality assured.
- Also Per Section 107 of the Clean Air Act, if U.S. EPA intends to modify recommendations made by the Governor, the Administrator must notify the State and provide an opportunity to demonstrate why any proposed modification is inappropriate. Such notification must be given no later than 120 days prior to promulgation of designations.
- Designations will be final by April 15, 2004.



Overview of the Eight-Hour Ozone Standard

State Implementation Plan and Attainment Deadlines

- ❑ States will have until 2007 (three years from the date of designation) to submit State Implementation Plans (SIPs) to U.S. EPA. A SIP outlines the control strategies and technical information to demonstrate how and when the area will achieve attainment of the standard.
- ❑ Attainment dates will likely be established based on nonattainment classifications (marginal, moderate, serious, severe, extreme). In Indiana, the attainment dates will likely range from 2007 to 2013.
- ❑ U.S. EPA expects to propose rules in Spring 2003 concerning ozone nonattainment classifications, attainment dates, and any mandatory ozone control measures.



U.S. EPA 8-Hour Schedule

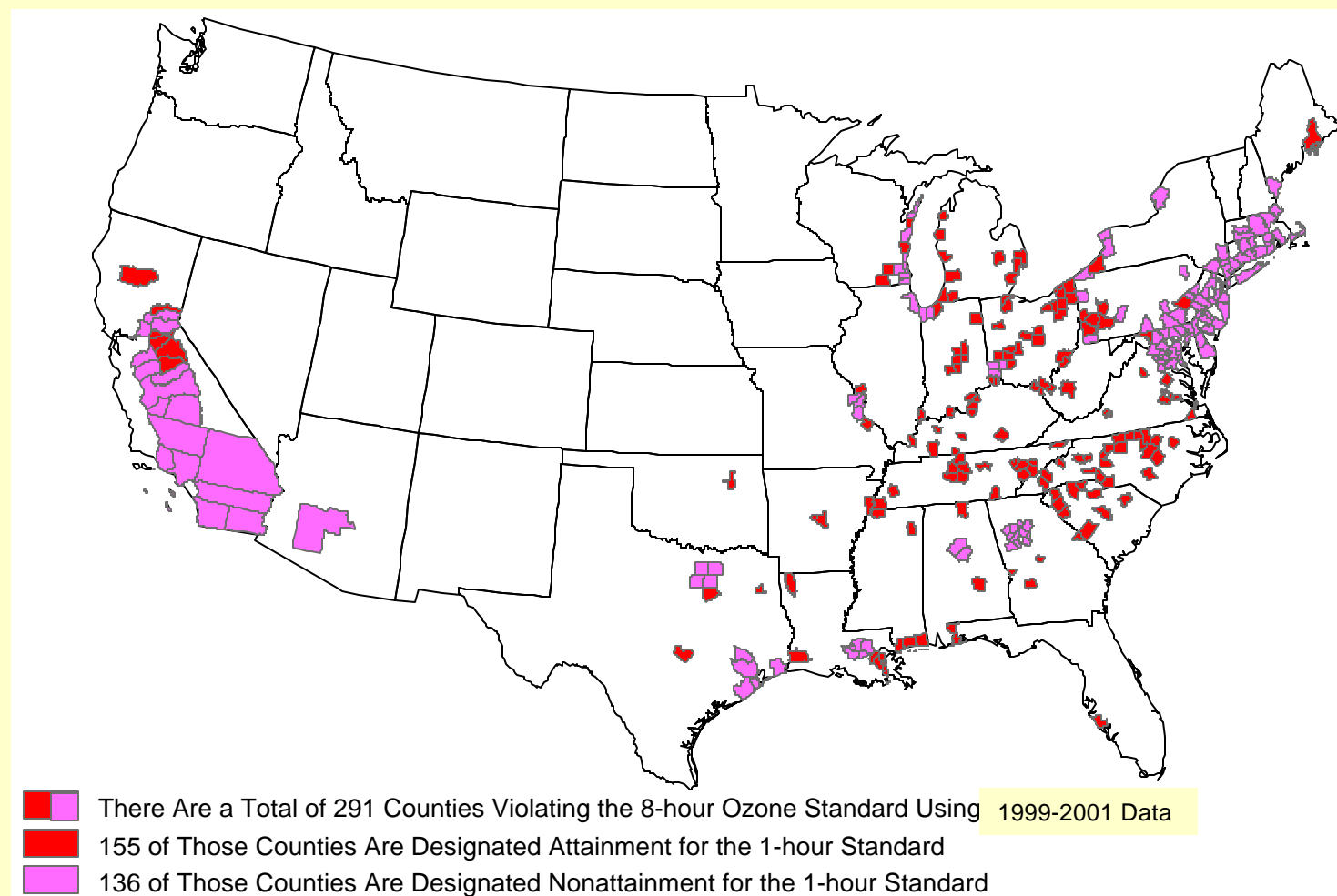
Early 2003	Publish proposed implementation rule
July 2003	States provide designation recommendations
Late 2003	Publish final implementation rule
April 2004	EPA signs final nonattainment designations (effective shortly after*)
April-May 2007	Nonattainment area SIPs submitted to EPA (3 years from effective date)
2007-2021	Range of attainment dates

Harmonization of 8-hr Ozone and PM2.5

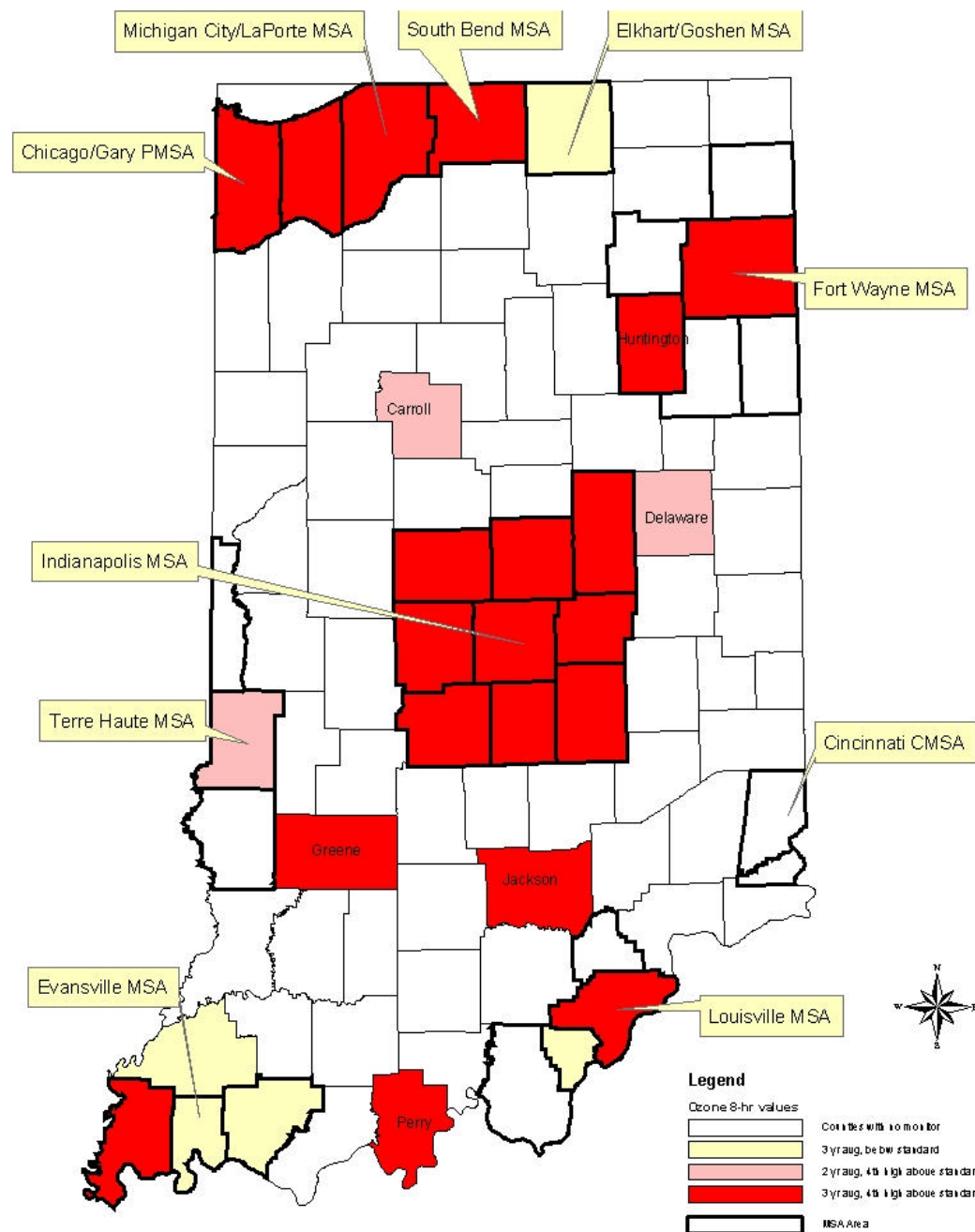
- ❑ End of 2003—Finalize O3 NAAQS implementation rule
- ❑ 2003-2004--propose and finalize PM2.5 implementation rule
- ❑ 2004 --Designate nonattainment and attainment areas under 8-hr ozone standard (after receiving recommendations from states). *Note: The statutory deadline for 8-hour ozone designations has passed, and EPA has negotiated settlement agreement on designations.*
- ❑ 2004--Designate nonattainment and attainment areas under PM2.5 standard (after receiving recommendations from states)
- ❑ 2007--States submit plans for implementing ozone and PM2.5 NAAQS (including state rules for emission reductions)



Counties violating the 8-hr ozone NAAQS 1999-2001



Indiana MSA Boundaries and Counties with O3 Monitors



Indiana Designation Recommendations

Outreach

- Information available through our website, and questions and comments can be shared via an on-line forum. (<http://www.in.gov/ideM/air/8hourstandard/index.html>)
- Mailing to interested and affected parties in each of the affected areas.
- Presentations/solicitation of comment through public meetings.

Information to be Used in Assessment Process

(Per U.S. EPA Guidance)

Primary

- Monitoring data
- MSA Boundaries

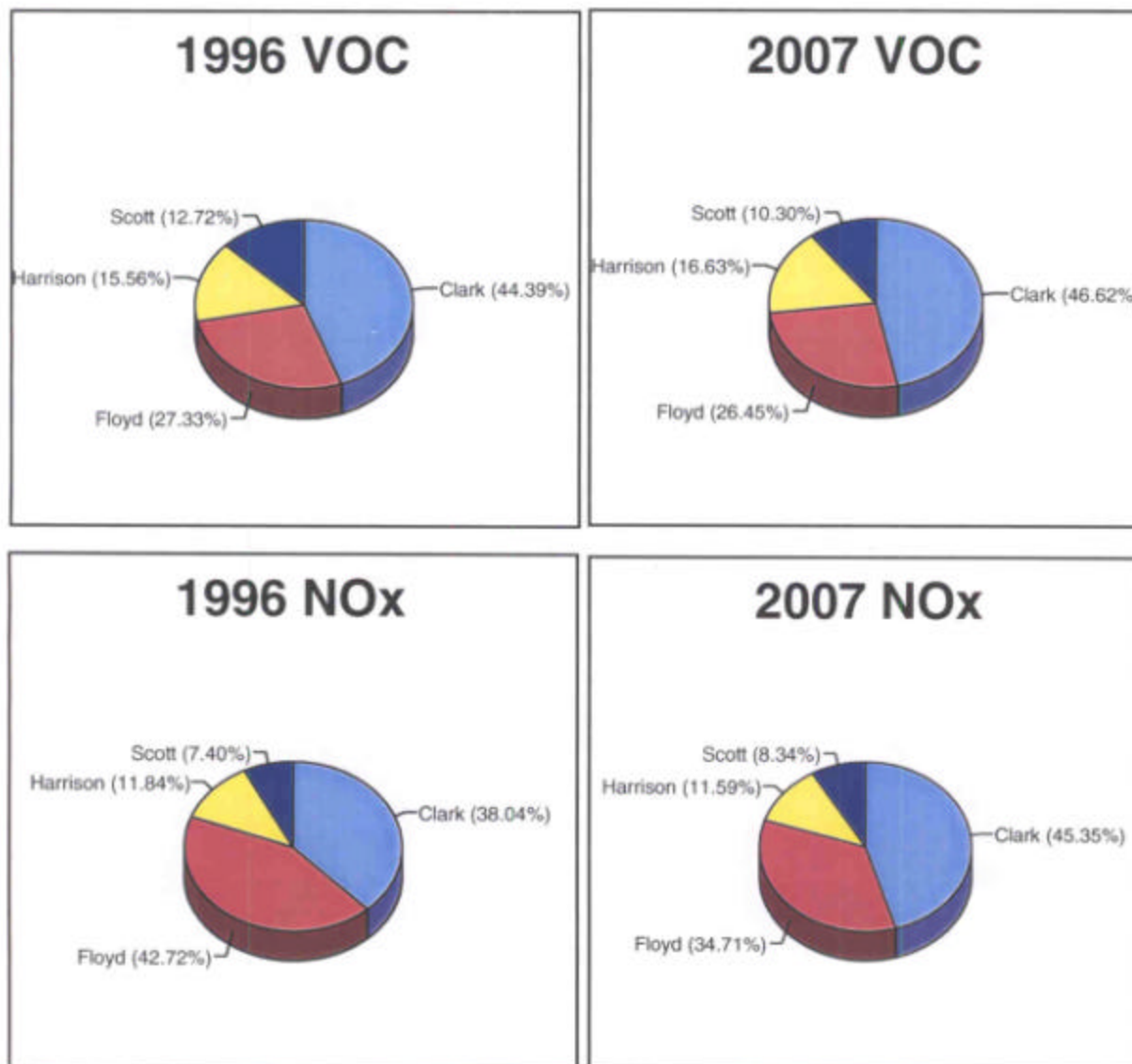
Secondary

- Emissions trends
- Traffic and employment patterns
- Population growth
- Commercial, residential, and industrial growth
- Meteorology



Total Emissions by County

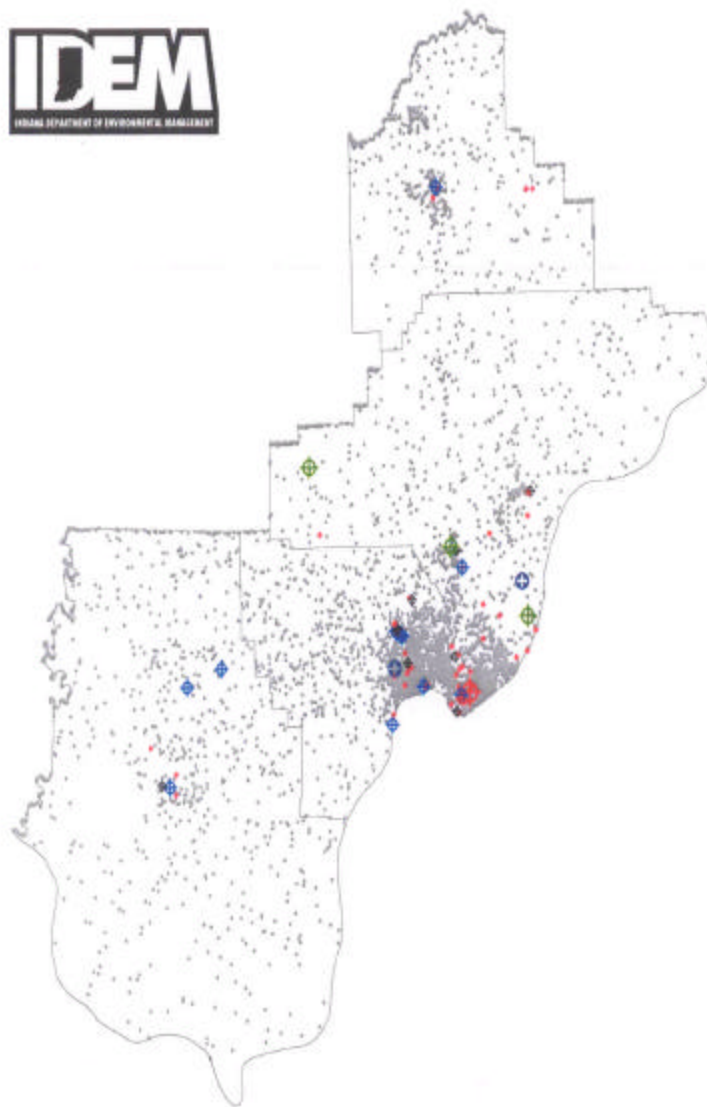
(1996 Actual Vs. 2007 Projected)

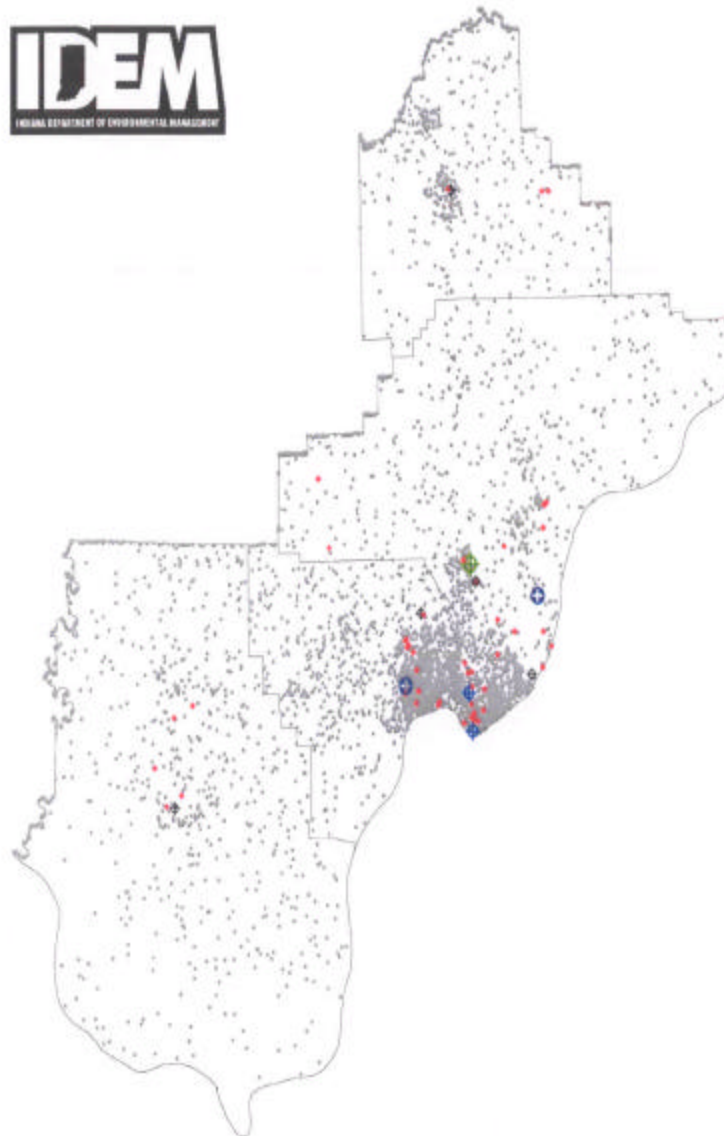




Jeffersonville MSA VOC Emitters (tons)

- ⊕ Jeffersonville MSA O3 Monitor
- VOC Emissions (tons)
 - 0 - 9.99
 - ◊ 10 - 24.99
 - ◆ 25 - 100
 - ⊕ 100.01 - 500
 - ⊕ 500.01 - 915
- Population Density (1990)
 - 1 Dot = 50





Jeffersonville MSA NOx Emitters (tons)

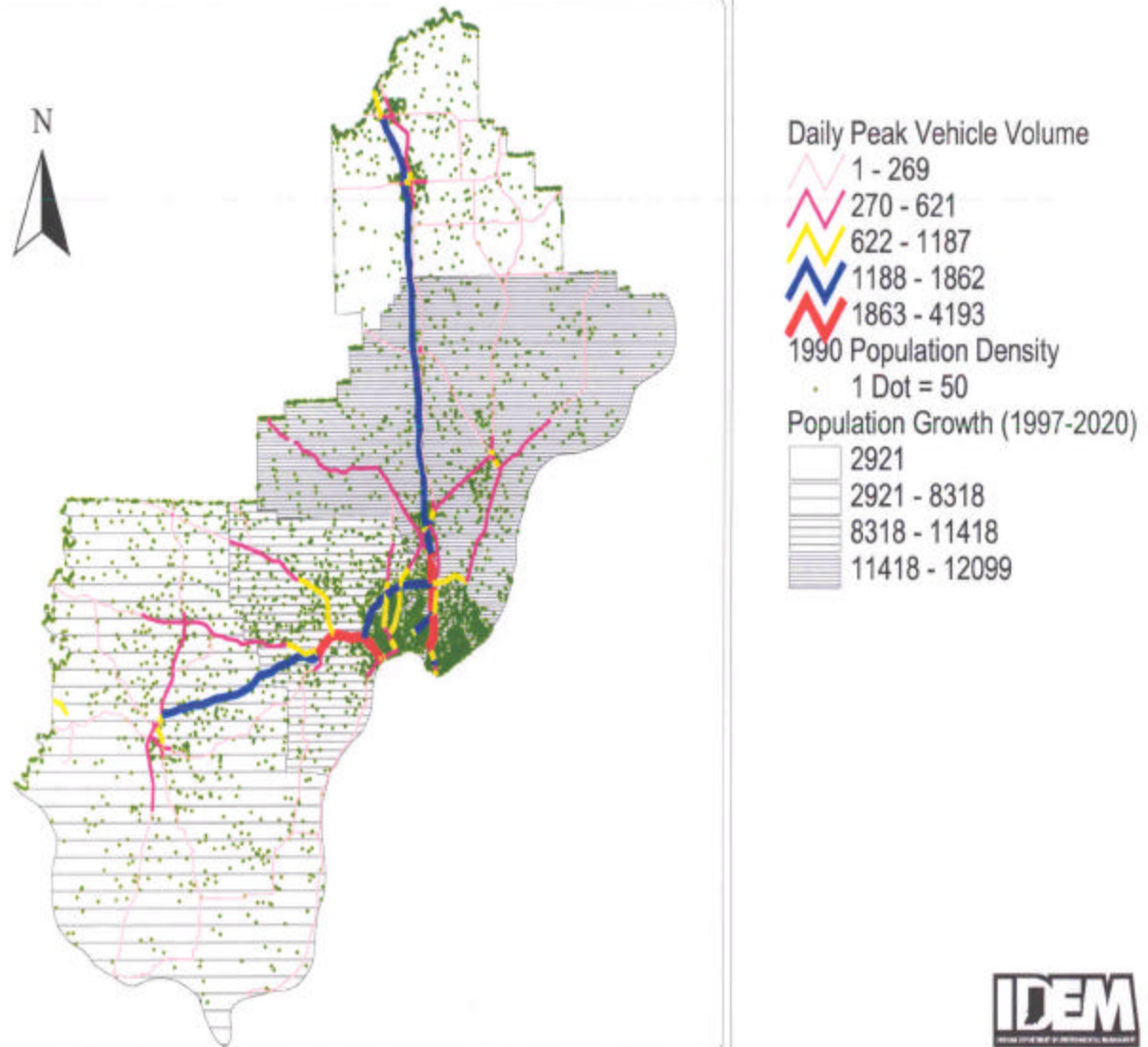
- Jeffersonville MSA O₃ Monitor
- NOx Emissions (tons)
 - 0 - 9.99
 - 10 - 24.99
 - 25 - 99.9
 - 100 - 6030
- Population Density (1990)
 - 1 Dot = 50



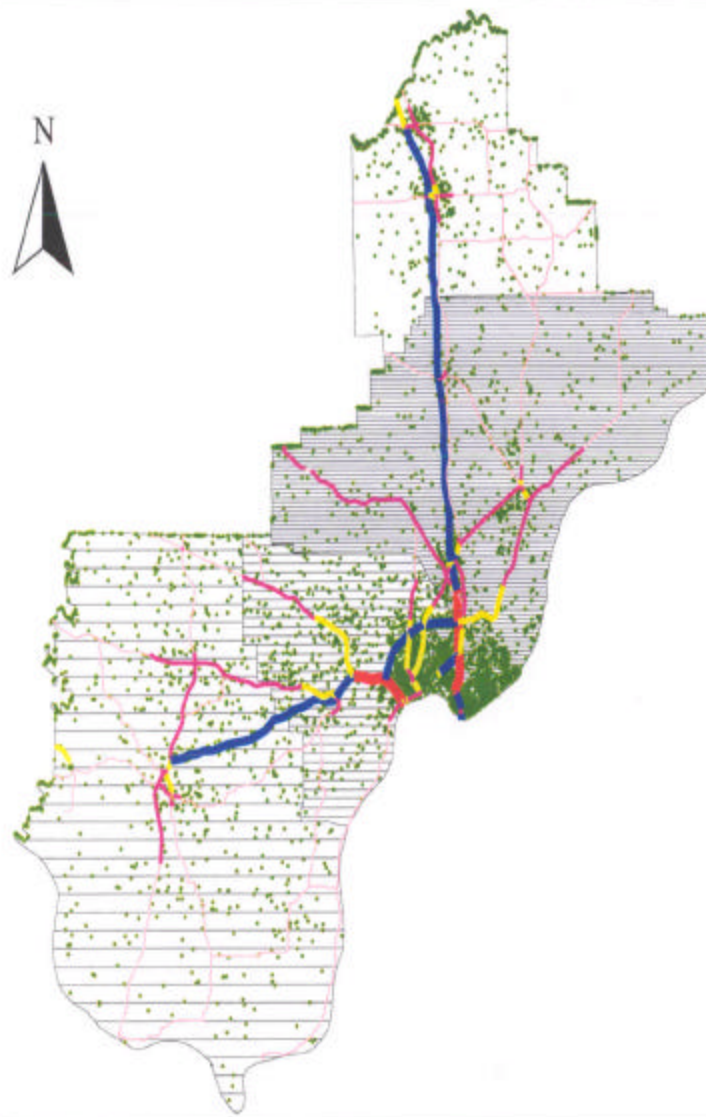
Population Growth

	1990	1997	# Change	% Change	2000	# Change	% Change	2020	# Change	% Change
Clark	87,774	93,212	5,438	6%	96,748	3,536	4%	105,311	12,099	13%
Floyd	64,404	71,465	7,061	11%	74,802	3,337	5%	82,883	11,418	16%
Harrison	29,890	33,999	4,109	14%	36,430	2,431	7%	42,317	8,318	24%
Scott	20,991	22,818	1,827	9%	23,672	854	4%	25,739	2,921	13%

Jeffersonville MSA Road and Population Data



Jeffersonville MSA Road and Population Data



Traffic Ratio

- 0 - 0.03
- 0.03 - 0.067
- 0.067 - 0.126
- 0.126 - 0.225
- 0.225 - 0.471

1990 Population Density

1 Dot = 50

Population Growth (1997-2020)

- 2921
- 2921 - 8318
- 8318 - 11418
- 11418 - 12099



Observations, Key Questions, and Next Steps

Observations

- A county within the Indiana portion of the MSA contains a monitor with a value above the standard (Charlestown .090 ppm).
- Based on 2000-2002 monitoring data, the area would qualify for a “marginal” classification, with a 2007 attainment deadline.

Key Questions

- How will the implementation rule affect the Greater Louisville Area?
- Should the entire Indiana Portion of the MSA be designated nonattainment?
- Should the nonattainment area be smaller than the MSA?

Next Steps

- IDEM accepting comment through May 2003
- Recommendations to be sent to Regional Administrator by July 15, 2003
- Designations final by April 2004



Contact Information

Website:

<http://www.in.gov/idem/air/8hourstandard/index.html>

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